# Prediction of Fear of COVID-19: Meaning in Life and Psychological Resilience

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# Abstract

The aim of this study is to examine the meaning in life and psychological resilience levels of university students as predictors of their fear of COVID-19. The research was carried out using the relational screening method, which is one of the quantitative research methods. The study consists of 475 university students, of which 353 women (74,3%), 122 men (25,7%), who are studying at different higher education institutions in Turkey and agree to participate voluntarily in the study. In the research; COVID-19 Fear Scale, Life Meaning Scale, and Brief Psychological Resilience Scale were used. In the study, while a negative non-significant relationship was found between university students' fear of COVID-19 and their meaning in life, in a negative way significant relationship was found with their psychological resilience levels. In addition, it has been showed that the life meaning and psychological resilience levels of university students explain 6% of their fear of COVID-19. The research results were discussed in the light of the literature and suggestions were made.

Keywords: Fear of COVID-19, Meaning in life, Psychological Resilience

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### Introduction

The COVID-19 pandemic, which first emerged in China at the end of 2019 and quickly spread to the World, was also seen in Turkey in March 2020, has created a great impact on individuals (Health Ministry of the Republic of Turkey, 2021). It is considered that the COVID-19 pandemic seen in Turkey at a later time than in other countries, has affected all age groups -- from children to the elderly -- physically, psychologically and socially. Individuals ' fear of contracting the disease, their belief that a difficult process awaits them when they contract the disease, and their concern for losing people around them due to this disease have caused psycho-social damage to the mental state of individuals (Stănculescu, 2021). În addition to these, a decrease in individuals' social interactions to protect themselves from COVID-19 and the increase in the time spent at home can further increase this stress that individuals experience (Droit-Volet et al., 2020; Polizzi et al., 2020). Although the condition of experiencing fear and stress caused by COVID-19 is normal for individuals' lives, the intense and frequent experience of these emotional reactions can be treated as a problem (Fofana et al., 2020; Satici et al., 2020). In this process, while some psycho-social characteristics of individuals have an accelerating effect on the fear of COVID-19 becoming abnormal, some features may have a preventive effect. For example, the fact that individuals experience conditions such as depression, anxiety, stress, anger, psychological vulnerability, trauma and addiction in their general lives can have an accelerating effect on the abnormal state of fear they experience during the covid-19 pandemic (Savi Çakar, 2018). However, individuals' having characteristics such as high self-esteem, emotional intelligence, conscious awareness, psychological well-being, hope, problem solving skills, psychological resilience and meaning in life can have a protective effect against the psychological problems they may experience in the COVID-19 pandemic (Savi Çakar, 2018). In this context, in this study, the fear of COVID-19 that individuals may experience during the pandemic period, meaning in life and psychological resilience were discussed in the context of two different protective factors. Fear can be defined as a natural condition that involves the emotional response of individuals to an uncertain situation they face in their lives (Gençöz, 1998). The rapid spread of the COVID-19 pandemic and its lethal effect create a threat perception in terms of making major changes in the lives of individuals, creating significant effects on vital experiences and may cause individuals to experience fear. (Ahorsu et al., 2020; Doğan & Düzel, 2020). In addition, technological tools that have taken an important position in the lives of individuals in recent years often have situations related to COVID-19 and the constant exposure of individuals to this situation may increase their fears. (Al Zubayer et al., 2020; Planchuelo-Gómez et al., 2020; Wang et al., 2020). In a study conducted by Doğan and Düzel (2020), 60% of the participants stated that the COVID-19 pandemic had negative effects on their psychological conditions. In addition, a large majority of participants, such as 94%, were very afraid that they and their relatives would be exposed to the disease. A study conducted by Bakioglu and his friends (2020) found a positively significant relationship between

individuals' COVID-19 fear levels and anxiety, fear and depression levels. The high fear experienced by individuals during COVID-19 can further deepen the psycho-social effects of the pandemic and have huge effects on the psychological states of individuals (Ladikli et al., 2020). Experts stress that it is not enough to take only physical measures for the COVID-19 pandemic, but that studies should be carried out to ensure that individuals can be psycho-socially well in order to remain immune (Griffiths & Mamun, 2020). In this context, countries carry out various studies to support the psycho-social well-being of their citizens in this process through relevant institutions. In this context, the situation of the predictive status of life meaning and psychological resilience factors on individuals' fear of COVID-19 was discussed.

The meaning in life, which is a subjective concept that involves individuals giving meaningful answers to why they live; it is an important factor for individuals to look forward to the future, to set goals and to have motivation to achieve these goals (Sarıçam, 2018). The meaning in life can be defined as the feeling and feeling felt about the nature of the existence of individuals (Celik et al., 2015). In another definition, the meaning in life; it can be treated as a situation of having a goal, goal or comprehensive mission that allows the individual to make sense of his life (Sarıçam, 2018). Especially in difficult and stressful situations such as the COVID-19 pandemic, it can be said that the meaning in life has an important place in the those who can stay strong. The high levels of meaning in life of individuals may indicate that they attach a meaning to their existence, that they have certain life goals and that they have the motivation to achieve these goals. This situation can protect individuals against the psychological destruction of the COVID-19 pandemic. Along with the meaning in life, the psychological resilience factor can also be considered as an important protective factor for individuals to stay strong against difficult situations.(Sarıçam, 2018). Psychological resilience can be defined as a concept that expresses the tendency of individuals to recover quickly in the face of negative life experiences and situations they face (Mizrak & Tutkun, 2020; Sarıçam, 2018; Soylu, 2020). By another definition, psychological resilience is expressed as the fact that individuals do not break down in the face of negative life experiences they face and can adapt to these changes that occur in their lives by staying strong (Karaırmak, 2006). Psychological resilience, such as the meaning in life, can be said to allow individuals to be least affected by negative psychological situations during the covid-19 pandemic (Yazici Celebi, 2020).

In this article, the levels of fear experienced by individuals during COVID-19 were examined in terms of various variables. In these studies, individuals' COVID-19 fear levels were often studied for risk factors such as negative psychological conditions like stress, depression, and anxiety (Al Zubayer et al., 2020; Bakioğlu et al., 2020; Doğan & Düzel, 2020; Parlapani et al., 2020; Planchuelo-Gómez et al., 2020; Satıcı et al., 2020; Stănculescu, 2021). Accordingly, in some studies, individuals' fears of COVID-19 were examined in terms of protective factors such as positivity, life satisfaction, social support and psychological flexibility (Bakioğlu et al., 2020; Lebel et al., 2020; Prentice et al., 2020; Satici et al., 2020; B. M. Smith et al., 2020; Ye et al., 2020). In this research, two of the protective factors that have not been much researched on the COVID-19 fear levels of individuals in the area will be discussed with the meaning in life and psychological relience. In this research, two of the protective factors that have not been much researched on the COVID-19 fear levels of individuals in the area will be discussed with the meaning in life and psychological resilience. It can be said that the findings of the study may be important for preventive studies to ensure that individuals remain strong in the face of the negative psycho-social situation brought about by the pandemic during the COVID-19 pandemic.

# **Purpose of the Research**

The aim of this study is to examine the meaning in life and psychological resilience levels of university students as predictors of their fear of COVID-19. In the research, in line with this general purpose, the following sub-goals were sought:

- 1. What are university students' scores for fear of COVID-19, meaning in life and psychological resilience?
- 2. What level of relationship is there between university students' fear of COVID-19 and their level of meaning in life and psychological resilience?
- 3. At what level do the life meaning and psychological resilience levels of university students predict their fear of COVID-19?

# Method

In this section, information about the model of the research, the working group, the data collection tool, the collection and analysis of the data, the validity and reliability of the research, and the limitations of my research are included.

# **Research Model**

Correlational survey model are research models aiming to determine the presence and/or degree of coexistence between two or more variables. According to the correlational survey model, the relationships among variables are examined in an existing situation without the intervention of the researcher (Fraenkel ve Wallen, 2006, s. 328).

# **Working Group**

The study's working group consists of 475 university students, 353 of whom are women (74.3%) and 122 of whom are men (25.7%), who study in different higher education institutions in Turkey and agree to participate voluntarily in the study. Table 1 includes demographic information about the study group.

Variables	Category	f
Gender	Woman	353
	Man	122
Cities with Restrictions	Yes	275
Cities without Restrictions	No	200
Total		475

**Table 1.** Demographics of university students participating in the study

When Table 1 is examined; 353 of the university students participating in the research are women and 122 are men. While 275 of these students live in cities in where implementation of the various restrictions in Turkey, 200 live in cities where there are no restrictions.

### **Data Collection Tool**

In the research; "COVID-19 Fear Scale" adapted to Turkish by Satici and his friends (2020), "Life Meaning Scale" adapted to Turkish by Akin and Taş (2015) and "Brief Psychological Resilience Scale" adapted to Turkish by Doğan (2015) were used. Permission has been obtained from authors who adapted the scales for the use of these measurement tools within the scope of the research. In addition, the demographic information of the university students who participated in the research was determined through the "Personal Information Form" developed by the researcher.

COVID-19 Fear Scale: The "COVID-19 Fear Scale" developed by Ahorsu and his friends (2020) and adapted to Turkish by Satici and his friends (2020) was used to determine the levels of COVID-19 fear of university students. The scale consists of one dimension and 7 substances. The scale was prepared in 5-point Likert type. The lowest score that can be obtained from the scale is 7, and the highest score is 35. Increased scores from the scale show that individuals' levels of FEAR of COVID-19 are increasing. In the analyzes to determine the reliability of the scale; Cronbach's alpha coefficient was found to be. 847, McDonald's omega coefficient as .849, Guttmann's lambda coefficient as .844 and composite reliability coefficient as .842. In the study of the validity of the scale, analyses were carried out using similar scales. In the analysis, positive significant relationships between fear of COVID-19 and depression (r = .38, p < .001), anxiety (r = .55, p < .001) and stress (r = .55, p < .001) and (r = .55, p < .55, p < .001) and (r = .55, p < .55, .47, p <.001) has been found. In addition, a significant negative correlation was found between fear of COVID-19 and life satisfaction (r = -20, p < .001). In addition to these, a model study was conducted in which direct and indirect effects were determined for the validity study of the scale. These results obtained in the study show that the scale is a suitable measurement tool that can be used in Turkish culture. In the re-conducted reliability study on the working group of this research, the cronbach alpha coefficient was calculated as .874.

*The Meaning in Life Scale:* The "The Meaning in Life" developed by Steger and his friends (2006) and adapted to Turkish by Akın and Taş (2015) was used to determine the life meaning levels of university students. The scale consists of 2 sub-dimensions: the Presence of Meaning in Life and the Search for Meaning in Life. The scale consists of 10 items prepared in 7-point Likert type. The

ninth item of the scale is reverse-coded. The lowest score that can be obtained from the scale is 10, and the highest score is 70. The increase in the scores obtained from the scale show that the individuals' levels of meaning in life have increased. In the reliability study of the scale; internal consistency coefficient was found as .77 for Presence of Meaning in Life sub-dimension and .83 for Search for Meaning in Life sub-dimension. In addition, the test-retest reliability coefficients obtained with 4-week intervals were found as .89 for the Presence of Meaning in Life and .92 for the Search for Meaning in Life. In the study of similar scale validity, the relationship between Meaning in Life and originality scales was examined and a positive relationship was found. In the explanatory factor analysis for the validity study of the scale, it was observed that 10 items explained 57% of the total varient and the items were collected in two sub-dimensions in the form of the Presence of Meaning in Life and the Search for Meaning in Life. The factor loads of the scale range from .54 to .77, and item total correlation scores between .42 and .68. In the confirmatory factor analysis, it was seen that the two-dimensional model fits well. (x<sup>2</sup>= 77.77, sd= 31, RMSEA= .065, NFI= .95, CFI= .97, GFI= .96, AGFI= .93, RFI= .93, SRMR= .065). These results obtained in the study show that the scale is a suitable measurement tool that can be used in Turkish culture. In the re-conducted reliability study conducted on the working group of this research, the cronbach alpha coefficient was calculated as .850 in the Presence of Meaning in Life and .860 in the Search for Meaning in Life sub-dimension.

Brief Psychological Resilience Scale: The "Short Psychological Resilience Scale" developed by Smith and his friends (2008) and adapted to Turkish by Doğan (2015) was used to determine the psychological resilience levels of university students. The scale consists of 6 items of 5-point Likert type. The second, fourth and sixth items of the scale are reverse-coded. The lowest score that can be obtained from the scale is 6, and the highest score is 30. The increase in the scores obtained from the scale indicates that the psychological resilience levels of the individuals increase. In the reliability study of the scale; It was observed that the corrected item total correlation values ranged from .49 to .66. In addition, the internal consistency coefficient value was found as .83 in the analysis. In the construct validity of the scale, it was observed that a single factor explained 54% of the total variance. It was observed that the factor loads of the scale items took values ranging between .63 and .79. In the criterion-related validity study for the validity study of the scale, psychological resilience and happiness (r = .40, p <.001), ego resilience (r = .61, p <.001) and a different psychological resilience scale (r = .66, p < .001) relationship was found. These results obtained in the study show that the scale is a suitable measurement tool that can be used in Turkish culture. In the re-conducted reliability study conducted on the working group of this research, the cronbach alpha coefficient was calculated as .855.

#### Process

The university students who participated in the study were informed about the purpose of the research and the scales. Participation in the research was reported to be voluntary and people who did not want to participate were not included in the research. The data was collected in a single session. The data collection process took about 15 minutes. After the data was collected, it was stated to those who wanted to learn the results of the scale filled in by themselves, and that the results could be shared with them if they wanted. In this context, these people who want to learn have been contacted at the end of the research. After the research data were collected, it was entered into the SPSS package program. Then, appropriate data analysis was made depending on the sub-problems of the research. First, frequency, percentage, mean and standard deviation were calculated to determine the fear of COVID-19, meaning in life and psychological resilience of university students. Then, Pearson Product Moment Correlation Analysis was conducted to examine the relationship between university students' fear of COVID-19, meaning in life, and psychological resilience. Finally, Multiple Linear Regression Analysis was conducted to determine to what extent university students' meaning in life and psychological resilience.

#### Limitations of the Study

In this study, the predictive relationship between university students' fear of COVID-19, meaning in life, and psychological resilience was examined. The research is limited to 475 university students studying in different higher education institutions in Turkey. In addition, the results of the study are limited to the qualities measured by the "COVID-19 Fear Scale", which is used to determine the levels of COVID-19 fear of university students, the "The Meaning in Life " used to determine life meaning levels, and the "Brief Psychological Resilience Scale" used to determine psychological resilience levels, and the analysis carried out by the researcher.

#### Results

In this part of the research, the results of the analyzes conducted in accordance with the general and sub-goals of the research are included.

# COVID-19 fear, life meaning and psychological Strength levels of University students

The fear of COVID-19, the meaning in life and psychological resilience levels of university students are included in Table 2.

Variable	f	Х	SS
The fear of COVID-19	475	15.22	5.93
Meaning in life	475	49.95	9.71
Psychological resilience	475	19.50	5.50

When Table 2 is examined; The average scores of the university students for fear of COVID-19 were 15.22, the mean of life scores were 49.95, and the mean scores for psychological resilience were found to be 19.50.

# The Relationship Between University Students' Fear of COVID-19, Meaning in life, and Psychological Resilience Levels

Pearson correlation analysis was applied to examine the relationship between university students' fear of COVID-19, meaning in life, and psychological resilience. The findings obtained from the analysis are included in Table 3.

Table 3. Relationship between university students' fear of COVID-19, meaning in life, and psychological resilience

Variable	1	2	3
1. Fear of COVID-19	1		
2.Meaning in life	056	1	
3. Psychological Resilience	247**	.215**	1

*Note.* \*\* *p* <.001; *significance level* 

When Table 3 is examined; While a negatively significant relationship was found between the fear of COVID-19 and psychological resilience levels of the university students participating in the study, a non-negatively significant relationship was found with the meaning in life levels.

Based on this finding; It can be said that as the psychological resilience and meaning in life levels of university students increase, their fear of COVID-19 will decrease.

# The Status of University Students' Life Meaning and Psychological Resilience Levels to Predict their Fear of COVID-19

Multiple linear regression was conducted to determine the extent to which the meaning in life and psychological resilience levels of university students predicted their fear of COVID-19. Table 4 contains the findings obtained as a result of the analysis.

Variable	В	$\mathrm{SH}_{\beta}$	β	Т	р	Binary r	Partial r
Constant	20.511	1.537		13.346	.001		
Psy. Resilience	266	.049	247	-5.399	.001	247	241
Meaning in Life	002	.028	003	072	.943	056	003
R=.247	$R^2 = .061$						
$F_{(2,472)}=15.4$	p=.001						

 Table 4. Multiple linear regression analysis result for predicting COVID-19 fear levels of college students

*Note.* \*\* *p* <.001; *significance level* 

As a result of multiple linear regression analysis conducted to predict how the variables of meaning in life and psychological resilience in which way predict fear of COVID-19, which are thought to have an effect on the levels of fear of COVID-19 of university students; meaning in life and psychological resilience variables together explained 6% of the total variance in fear of COVID-

19 (R=.247, R<sup>2</sup>=.061). In addition, while psychological resilience variable (p = .000; p < .05) was found to be a significant predictor of COVID-19 fear, meaning in life variable (p=.943; p>.05) was not found to be a significant predictor. According to the standardized regression coefficients, the relative order of importance of predictive variables on fear of COVID-19 is psychological resilience (= -.247) and meaning in life (= -.003).

#### **Conclusion, Discussion and Suggestions**

In the study, while a negative non-significant relationship was found between university students' fear of COVID-19 and their level of meaning in life, a negative significant relationship was found with their psychological resilience levels. In addition, it has been observed that the life meaning and psychological resilience levels of university students explain 6% of their fear of COVID-19.

As a result of the research, psychological resilience was found to be the most important predictor of COVID-19 fear. When considered as a preventive factor, psychological resilience can be defined as a power that enables individuals to effectively cope with these difficulties when they face difficult situations (Gizir, 2007; Karaırmak, 2006). When considered from this point of view, it is thought that the high psychological resilience of individuals against a difficult life experience such as the COVID-19 pandemic may prevent the development of the unusual fear they may experience in this process. In the literature, it is seen that there are studies showing that psychological resilience has a protective power against many difficult life experiences that individuals may encounter. In a study conducted by Arslan and Balkıs (2016) with adolescents, it was seen that psychological resilience was a protective factor in the relationship between perceived emotional abuse from parents and problem behaviors in adolescents. A study conducted by wise and wise (2020) in Turkey during the COVID-19 pandemic showed that psychological resilience has a protective role in terms of the situation in which individuals experience psychological symptoms during the pandemic. In the path analysis carried out another study conducted during the COVID-19 pandemic in Turkey, it was observed that psychological resilience created a negative significant effect with intolerance to anxiety and uncertainty experienced during the pandemic period. (Kasapoğlu, 2020). This result shows that psychological resilience has a protective power against anxiety and intolerance to uncertainty during the pandemic period. In the study by Yazıcı Çelebi (2020) in which psychological responses of individuals during the COVID-19 pandemic were examined in terms of psychological resilience, it was seen that individuals with low psychological resilience were more affected by the negative situations brought about by the pandemic process. In a study conducted by Karatas and Tagay (2021), a negative significant relationship was found between the fear of COVID-19 and their life satisfaction levels of adults affected by COVID-19. These studies in the literature show that psychological resilience has a protective factor in terms of psycho-social problems that individuals may experience in difficult living conditions such as COVID-19.

As a result of the research, it was seen that the meaning in life is a non-significant predictor of COVID-19 fear. The concept of life meaning, which includes the individual having a comprehensive purpose, goal and mission related to his life, can enable individuals to remain strong in the face of difficult situations (Sarıçam, 2018). However, some psycho-social characteristics of individuals may cause individuals' meanings of life to be negatively affected by difficult and stressful situations. For example, a bereavement or trauma experienced by a person can have negative effects on the meaning in life and prevent motivation for the realization of the meaning in life. In this context, it can be said that individuals ' life meanings may be negatively affected in the face of a stressful situation such as COVID-19. In this study, the non-meaningful relationship between life meaning and COVID-19 can be interpreted as a non-meaningful prediction situation occured in terms of some of the people involved in the study create negative effects on life meaning in this stressful process.

This study was conducted to determine to what extent university students' mean of life and psychological resilience levels predicted their fear of COVID-19 levels. As a result of the research, it was seen that psychological resilience was a significant predictor of COVID-19 fear. In this extent, activities such as psycho-education to increase psychological resilience to be carried out by the Psychological Counseling and Guidance practice centers of universities within the scope of preventive mental health services may be important for university students to remain strong against stressful situations. In addition, this study examined the variables of meaning in life and psychological resilience that predicted the fear of COVID-19 of university students. In future studies, the predictive status of different protective factors on COVID-19 fear can be examined. Finally, this research was conducted with university students using quantitative research method. Studies can be carried out with different study groups and research methods in future studies.

#### References

- Ahorsu, D. K., Lin, C. Y., Imani, V., Saffari, M., Griffiths, M. D., & Pakpour, A. H. (2020). The fear of COVID-19 scale: development and initial validation. International Journal of Mental Health and Addiction, 1–9. https://doi.org/doi: 10.1007/s11469-020-00270-8
- Akın, A., & Taş, İ. (2015). Yaşam anlamı ölçeği: Geçerlik ve güvenirlik çalışması. [Meaning ın life questionnaire: a study of validity and reliability]. Turkish Studies, 10(3), 27–36. http://dx.doi.org/10.7827/TurkishStudies.7860
- Al Zubayer, A., Rahman, M. E., Islam, M. B., Babu, S. Z. D., Rahman, Q. M., Bhuiyan, M. R. A. M., ..., & Habib, R. B. (2020). Psychological states of Bangladeshi people four months after the COVID-19 pandemic: An online survey. Heliyon, 6(9), e05057. https://doi.org/10.1016/j.heliyon.2020.e05057
- Arslan, G., & Balkıs, M. (2016). Ergenlerde duygusal istismar, problem davranışlar, öz-yeterlik ve psikolojik sağlamlık arasındaki ilişki. [The relationship between emotional maltreatment, problem behaviors, psychological resilience, and self- efficacy in adolescents]. Sakarya University Journal of Education, 6(1), 8–22. http://dx.doi.org/10.19126/suje.35977

- Bakioğlu, F., Korkmaz, O., & Ercan, H. (2020). Fear of COVID-19 and Positivity: Mediating Role of Intolerance of Uncertainty, Depression, Anxiety, and Stress. International Journal of Mental Health and Addiction, 1–14. https://doi.org/10.1007/s11469-020-00331-y
- Bilge, Y., & Bilge, Y. (2020). Koronavirüs salgını ve sosyal izolasyonun psikolojik semptomlar üzerindeki etkilerinin psikolojik sağlamlık ve stresle baş etme tarzları açısından incelenmesi. [nvestigation of the effects of corona virus pandemic and social isolation on psychological symptoms in terms of psychological resilience and coping styles (tur)]. Turkish Journal of Clinical Psychiatry, 23. DOI: 10.5505/kpd.2020.66934
- Büyüköztürk, Ş., Kılıç Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2018). Eğitimde bilimsel araştırma yöntemleri. [Scientific research methods in education]. Pegem.
- Celik, I., Saricam, H., Sakiz, H., & Ilbay, A. B. (2015). The link between critical thinking dispositions and life satisfaction among university students: The mediating role of meaning in life. Ozean Journal of Social Science, 8(3), 121–138.
- Ceyhan, E., Ceyhan, A. A., & Gürcan, A. (2007). Problemli internet kullanımı ölçeği'nin geçerlik ve güvenirlik çalışmaları. [The validity and reliability of the problematic internet usage scale]. Kuram ve Uygulamada Eğitim Bilimleri (KUYEB) Dergisi, 7, 387–416.
- Doğan, M. M., & Düzel, B. (2020). Covid-19 Özelinde Korku-Kaygı Düzeyleri. [Fear-anxiety levels in covid-19]. Electronic Turkish Studies, 15(4), 739–752. https://dx.doi.org/10.7827/TurkishStudies.44678
- Doğan, T. (2015). Kısa Psikolojik Sağlamlık Ölçeği'nin Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. [Adaptation of the Brief Resilience Scale into Turkish: A validity and reliability study]. The Journal of Happiness & Well-Being, 3(1), 93–102.
- Doğan, T., & Çötok, N. A. (2011). Oxford mutluluk ölçeği kısa formunun Türkçe uyarlaması: Geçerlik ve güvenirlik çalışması. [Adaptation of the Short Form of the Oxford Happiness Questionnaire into Turkish: A Validity and Reliability Study]. Turkish Psychological Counseling and Guidance Journal, 4(36), 165–170.
- Droit-Volet, S., Gil, S., Martinelli, N., Andant, N., Clinchamps, M., Parreira, L., ... & Dutheil, F. (2020). Time and Covid-19 stress in the lockdown situation: Time free,«Dying» of boredom and sadness. PloS one, 15(8),1-15. https://doi.org/10.1371/journal.pone.0236465
- Fofana NK, Latif F, Sarfraz S, Bilal, Bashir MF, Komal B. Fear and agony of the pandemic leading to stress and mental illness: An emerging crisis in the novel coronavirus (COVID-19) outbreak. Psychiatry Res. 2020 Sep;291:113230. doi: 10.1016/j.psychres.2020.113230.
- Fraenkel, J. R., & Wallen, N. E. (2006). How to Design and Evaluate Research in Education. NewYork: McGraw-Hill.
- Gençöz, T. (1998). Korku: Sebepleri, sonuçları başetme yolları. [Fear: Causes, consequences, and ways ofcoping]. Kriz Dergisi, 6(2), 9–16.
- Gizir, C. A. (2007). Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler üzerine bir derleme çalışması. [A literature review of studies on resilience, risk, and protective factors]. Turkish Psychological Counseling and Guidance Journal, 3(28), 113–128.
- Griffiths, M. D., & Mamun, M. A. (2020). COVID-19 suicidal behavior among couples and suicide pacts: Case study evidence from press reports. Psychiatry Research, 289, 113105. https://doi.org/10.1016/j.psychres.2020.113105

- Karaırmak, Ö. (2006). Psikolojik sağlamlık, risk faktörleri ve koruyucu faktörler. [Resilience, risk and protective factors]. Turkish Psychological Counseling and Guidance Journal, 3(26), 129–142.
- Karataş, Z., & Tagay, Ö. (2021). The Relationships between Resilience of the Adults Affected by the Covid Pandemic in Turkey and Covid-19 Fear, Meaning in Life, Life Satisfaction, Intolerance of Uncertainty and Hope. Personality and Individual Differences, 172, 110592. https://doi.org/https://doi.org/10.1016/j.paid.2020.110592
- Kasapoğlu, F. (2020). COVID-19 salgını sürecinde kaygı ile maneviyat, psikolojik sağlamlık ve belirsizliğe tahammülsüzlük arasındaki ilişkilerin incelenmesi.[ Examination of the relationship between anxiety with spirituality, resilience and intolerance of uncertainty in the covid-19 outbreak process]. Electronic Turkish Studies, 15(4), 599–614. https://doi.org/https://dx.doi.org/10.7827/TurkishStudies.44284
- Ladikli, N., Bahadır, E., Yumuşak, F. N., Akkuzu, H., Karaman, G., & Türkkan, Z. (2020). Kovid-19 korkusu ölçeğinin Türkçe güvenirlik ve geçerlik çalışması. [the reliability and validity of turkish version of coronavirus anxiety scale]. International Journal of Social Science, 3(2), 71– 80.
- Lebel, C., MacKinnon, A., Bagshawe, M., Tomfohr-Madsen, L., & Giesbrecht, G. (2020). Elevated depression and anxiety among pregnant individuals during the COVID-19 pandemic. Journal of Affective Disorders, 277, 5–13. https://doi.org/10.1016/j.jad.2020.07.126
- Mizrak, S. & Tutkun, T. (2020). Psychological Resilience Level of Individuals Living in Çanakkale, Turkey . Educational Policy Analysis and Strategic Research (EPASR), 15(1), 178-196. doi: 10.29329/epasr.2020.236.10
- Noyan, C. O., Darçin, A. E., Nurmedov, S., Yilmaz, O., & Dilbaz, N. (2015). Akıllı Telefon Bağımlılığı Ölçeğinin Kısa Formunun üniversite öğrencilerindeTürkçe geçerlilik ve güvenilirlik çalışması. [Validity and reliability of the Turkish version of the Smartphone Addiction Scale-Short Version among university students]. Anatolian Journal of Psychiatry, 16, 73–81. doi: 10.5455/apd.176101
- Parlapani, E., Holeva, V., Nikopoulou, V. A., Sereslis, K., Athanasiadou, M., Godosidis, A., & Diakogiannis, I. (2020). Intolerance of uncertainty and loneliness in older adults during the COVID-19 pandemic. Frontiers in Psychiatry, 11, 1–12. https://doi.org/10.3389/fpsyt.2020.00842
- Planchuelo-Gómez, Á., Odriozola-González, P., Irurtia, M. J., & de Luis-García, R. (2020). Longitudinal evaluation of the psychological impact of the COVID-19 crisis in Spain. Journal of Affective Disorders, 277, 842–849. https://doi.org/10.1016/j.jad.2020.09.018
- Polizzi, C., Lynn, S. J., & Perry, A. (2020). Stress and coping in the time of covid-19: pathways to resilience and recovery. Clinical Neuropsychiatry, 17(2), 59–62. https://doi.org/10.36131/CN20200204
- Prentice, C., Zeidan, S., & Wang, X. (2020). Personality, trait EI and coping with COVID 19 measures. International Journal of Disaster Risk Reduction, 51, 101789. https://doi.org/10.1016/j.ijdrr.2020.101789
- Sarıçam, H. (2018). Önleyici psikolojik danışma açısından koruyucu faktörler. [Protective factors in terms of preventive counseling]. In F. Savi Çakar (Ed.), Önleyici psikolojik danışma kuram ve uygulamaları [Preventive counseling theories and practices] (pp. 77–118). Pegem.
- Satici, B., Gocet-Tekin, E., Deniz, M. E., & Satici, S. A. (2020). Adaptation of the Fear of COVID-19 Scale: Its association with psychological distress and life satisfaction in Turkey. International Journal of Mental Health and Addiction. https://doi.org/10.1007/s11469-020-00294-0

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Savi Çakar, F. (2018). Önleyici psikolojik danışma kuram ve uygulamaları. Nobel.

- Smith, B. M., Twohy, A. J., & Smith, G. S. (2020). Psychological inflexibility and intolerance of uncertainty moderate the relationship between social isolation and mental health outcomes during COVID-19. Journal of Contextual Behavioral Science, 18, 162–174. https://doi.org/10.1016/j.jcbs.2020.09.005
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: assessing the ability to bounce back. International Journal of Behavioral Medicine, 15(3), 194–200. DOI: 10.1080/10705500802222972
- Soylu, Y. (2020). University Students' Emotions and Hopes as the Predictors of Their Psychological Resilience after Terrorist Attacks . International Journal of Progressive Education (IJPE), 16(2), 17-25. doi: 10.29329/ijpe.2020.241.2
- Stănculescu, E. (2021). Fear of COVID-19 in Romania: Validation of the Romanian Version of the Fear of COVID-19 Scale Using Graded Response Model Analysis. International Journal of Mental Health and Addiction, 1–16. https://doi.org/https://doi.org/10.1007/s11469-020-00428-4
- Steger, M. F., Frazier, P., Oishi, S., & M., K. (2006). The meaning in life questionnaire: Assessing the presence of and search for meaning in life. Journal of Counseling Psychology, 53(1), 80–93. https://doi.org/10.1037/0022-0167.53.1.80
- TC Sağlık Bakanlığı. (2021). COVID-19 Bilgilendirme Sayfası. https://covid19.saglik.gov.tr/
- Wang, J., Wang, Z., Liu, X., Yang, X., Zheng, M., & Bai, X. (2020). The impacts of a COVID-19 epidemic focus and general belief in a just world on individual emotions. Personality and Individual Differences, 168, 110349. https://doi.org/10.1016/j.paid.2020.110349
- Yazıcı Çelebi, G. (2020). Covid 19 Salgınına İlişkin Tepkilerin Psikolojik Sağlamlık Açısından İncelenmesi. [Investigation of Reactions to the Covid 19 Outbreak in terms of Psychological Resilience] IBAD Journal of Social Sciences, 8, 471–483. https://doi.org/10.21733/ibad.737406
- Ye, B., Wu, D., Im, H., Liu, M., Wang, X., & Yang, Q. (2020). Stressors of COVID-19 and stress consequences: The mediating role of rumination and the moderating role of psychological support. Children and Youth Services Review, 118, 105466. https://doi.org/10.1016/j.childyouth.2020.105466